

REMARKS

Summary of Office Action

Claims 1-17 were pending in the above-identified patent application.

The Examiner has requested information under 37 C.F.R. § 1.105.

The Examiner has rejected claims 1-5 and 7-12 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

In addition, claims 1-7, 9-15, and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Vrij et al. "People's insight into their own behaviour and speech content while lying." British Journal of Psychology. London: May 2001, Vol. 92 Part 2, page 373 (hereinafter "Vrij") in view of Johnson, JR. U.S. Patent Application Publication No. 2002/0062089 (hereinafter "Johnson") in view of Barboza "Smith Barney agrees to Settle Bond Charges for \$2 Million." New York Times (Late Edition (East Coast)). New York, N.Y., September 24, 1997, page D. 10 (hereinafter "Barboza") in view of Weber et al. U.S. Patent No. 5,564,005 (hereinafter "Weber").

Claims 8 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Vrij in view of Johnson in view of Barboza in view of Weber in view of McFarling U.S. Patent Application Publication No. 2004/0117760 (hereinafter "McFarling").

Summary of Applicant's Reply

Applicant has amended independent claims 1 and 6, as well as dependent claim 2, to more particularly define the invention. In addition, applicant has added new claims 18 and 19. These amendments do not add new matter and are fully supported by the original specification. Support for these

claims can be found, for example, in paragraphs 9 and 54 of applicant's specification.

The Examiner's rejections are respectfully traversed.

Applicant's Reply to the Requirement for Information under 37 C.F.R. § 1.105

The Examiner has reiterated and expanded a request for information under 37 C.F.R. § 1.105. In particular, the Examiner has expanded the scope of information requested in the previous Office Action dated September 24, 2008 ("previous Office Action"), stating that the information is required to identify publications embodying applicant's claimed subject matter.\*

In the previous Office Action, the Examiner cited an article originally published in Barron's Magazine, dated June 24, 2006, entitled, "Is Your CEO Lying" (hereinafter "the article"). The article is about behavioral analyses of public figures, including corporate executives, performed by Business Intelligence Advisors ("BIA"), the assignee of this application. The article refers to a video of an April 2001 CNBC interview with a corporate executive who was later investigated and charged with securities fraud. The Examiner cited a portion of the article that states that BIA began using this video in the "spring of 2001."†

In view of the article, the Examiner requested a) any known publications, brochures, manuals and press releases that describe BIA's services and/or products that

---

\* Applicant notes that the Examiner incorrectly describes the subject matter disclosed in this application as "a method and system for facilitating a sale of a product from an inventory of a selling entity" (Office Action, page 2, ¶ 7).

† Applicant wishes to point out that this video was used internally during the spring of 2001. During that time period, the video was not used as part of any products or services embodying applicant's claimed subject matter.

were subject of the article including any material that describes analyzing a corporate disclosure for verbal and non-verbal deceptive behavior analysis and b) the names and descriptions of any products or services that have incorporated the claimed subject matter as of and subsequent to April 2001.

In addition, the Examiner cited a letter from Security Training Inc. ("STI") dated February 26, 2002 (hereinafter "the letter"), which was provided with the applicant's Information Disclosure Statement dated July 31, 2008. The letter refers to an STI training program entitled "Deceptive Behavior Detection and Strategic Elicitation," and states that the program "was the focus of our recent introductory session in New York." The Examiner further cited the course description enclosed with the letter that lists Philip R. Houston, the inventor of the instant application, as an expert.

In view of the letter, the Examiner requested a) that the applicant provide the nature of the relationship of STI and BIA, b) all course materials, written and video, (not just promotional excerpts) and the dates of all courses relating to deceptive behavior detection that were conducted prior to February 26, 2002 and c) any training materials that were used to train financial, human resources, auditing and other key professionals to detect deceptive behavior, as described in the letter.

On February 4, 2009, a telephonic interview took place between Examiner Gabrielle McCormick, Supervisory Examiner John G. Weiss, and the undersigned. During the telephonic interview, undersigned and the Examiners discussed the 37 C.F.R § 1.105 request for information. In particular, the Examiner clarified that the 37 C.F.R § 1.105 request for information was inclusive of the period beginning with the Spring of 2001 and continuing through February, 5, 2002, a year before the priority date of the instant application.

Responsive to the Examiner's previous requirement for information, applicant has to date submitted the following items and notes:

A. An Information Disclosure Statement was filed on July 31, 2008 listing known and readily available publications, brochures, manuals and press releases that describe BIA's services and/or products that were subject of the article including any material that describe analyzing a corporate disclosure for verbal and non-verbal deceptive behavior analysis. This listing included known and readily available descriptions of any products or services that incorporate the claimed subject matter for the time period beginning with the Spring of 2001 and continuing through February, 5, 2002, pursuant to the Examiner's previous request.

B. Applicant noted in the previous Reply to Office Action dated March 24, 2009 ("previous Reply"), that Security Training Inc. was the previous name of BIA, and that, as such, STI and BIA are a single entity.

C. Applicant noted in the previous Reply that the above referenced Information Disclosure Statement, submitted on July 31, 2008, includes all known and readily available documents and materials describing any product or service that incorporates the claimed subject matter for the time period beginning with the Spring of 2001 and continuing through February, 5, 2002.

In the pending Office Action, the Examiner has reiterated the request that the Applicant provide the nature of the relationship of STI and BIA. In addition, the Examiner has expanded the request for information to include all course materials, written and video, and the dates of all courses relating to deceptive behavior detection that were conducted prior to February 26, 2002. Lastly, the Examiner has requested any training materials that were used to train

financial, human resource, auditing and other key professionals to detect deceptive behavior.

Responsive to the Examiner's expanded requirement for information, applicant submits that the above referenced Information Disclosure Statement includes all known and readily available course materials and the dates of all courses relating to deceptive behavior detection that were conducted by STI or BIA prior to February 26, 2002. Applicant further submits that the above referenced Information Disclosure Statement includes all known and readily available training materials that were used by STI or BIA to train financial, human resource, auditing and other key professionals to detect deceptive behavior.

Insofar as applicant is required to "submit information already known but there is no requirement to search for information that is unknown" (MPEP § 704.12(b)), and insofar as applicant is "expected to make a reasonable inquiry under the circumstances to find the factual information requested (37 CFR 10.18(b)(2))" (MPEP § 704.11), applicant submits that the foregoing is a complete reply to the requirement under 37 C.F.R. § 1.105.

#### Applicant's Reply to the 35 U.S.C. § 101 Rejection

The Examiner has rejected claims 1-5 and 7-12 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In particular, the Examiner asserts that independent claim 1 recites process steps that are not tied to a particular machine. This rejection is respectfully traversed.

Applicant's amended independent claim 1 is directed to a method for analyzing a corporate disclosure. A record of a corporate disclosure by a representative is received and displayed on a display. The record on the display is reviewed with a processor to determine, *inter alia*, the presence of a

cluster of deceptive behaviors. In turn, the record is annotated, using an annotator, to indicate the presence of the cluster of deceptive behaviors within the corporate disclosure as well as the type and number of deceptive behaviors within the cluster of deceptive behaviors. The types of deceptive behaviors as referenced in the annotation are retrieved from a database.

In rejecting method claim 1, the Examiner has relied on the decision of the Court of Appeals for the Federal Circuit in In re Bilski, 545 F.3d 943, 88 USPQ2d 1385 (Fed.Cir. 2008) and various United States Supreme Court decisions cited in Bilski. According to the Examiner's formulation of the Bilski test, for a method to be statutory subject matter under 35 U.S.C. § 101, the claim must be tied to a particular machine or it must transform an article. This machine or transformation test is subject, according to the Examiner, to two limitations: (1) "the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility," and (2) "the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity" (Office Action, page 4, ¶ 12).

The Examiner argues that the use of a display, as recited in applicant's claims, is merely insignificant extra-solution activity and is not sufficient to satisfy the machine or transformation test set forth in Bilski. The Examiner further alleges that the claimed steps of determining the presence of a cluster of deceptive behaviors and annotating the record are activities not tied to a particular machine. Specifically, the Examiner points to paragraphs 40 and 41 of the applicant's specification in an attempt to show that a human reviewer, and not a machine, makes decisions regarding the annotations and actually performs the annotation. The Examiner argues that the use of an annotator, as recited in claim 1, is insignificant extra-solution activity that is not

sufficient to satisfy the machine or transformation test set forth in Bilski.

Without taking a position on the "transformation" prong of the Bilski test, applicant respectfully submits that independent claim 1 is sufficiently tied to a particular machine in order to satisfy the statutory requirements under 35 U.S.C. § 101. Although the Bilski court did not address what constituted a sufficient machine tie-in for a method to qualify as a statutory process under the tied-to-a-machine prong, it did address one category of insufficient tie-in, which is "insubstantial post or extra-solution activity," whereby a method otherwise totally independent of a machine includes a step that adds some insignificant machine-related action at the end, or at some other time during performance of the method.

Applicant respectfully submits that the machine activity in applicant's claim 1 is much more than mere "insubstantial post or extra-solution activity." In particular, each of the apparatus elements recited in claim 1, including the display, processor, annotator, and database, is essential to accomplishing the claimed method steps. For example, the processor is vital to reviewing the record to determine the presence of a cluster of deceptive behaviors. As another example, the annotator, with its access to a database of deceptive behavior types, is critical to annotating the record with the indications specified in claim 1. Successful execution of the method steps of claim 1 therefore depends directly on the claimed apparatus elements, and so the latter cannot be mere "insubstantial post or extra-solution activity." As such, applicant respectfully submits that independent claim 1 is sufficiently tied to a particular machine in order to satisfy the statutory requirements under 35 U.S.C. § 101. Applicant further notes that claim 1, as amended, is fully supported by the original specification (see, e.g., Specification, ¶ 54).

Accordingly, for at least the foregoing reasons, applicant respectfully requests that the rejection of amended independent claim 1 under 35 U.S.C. § 101 be withdrawn. Additionally, for at least the reason that claims 2-5 and 7-12 are dependent from independent claim 1, applicant respectfully requests that the rejection of claims 2-5 and 7-12 under 35 U.S.C. § 101 also be withdrawn.

Applicant's Reply to the Prior Art Rejection

The Examiner has rejected claims 1-7, 9-15, and 17 under 35 U.S.C. § 103(a) as being unpatentable over Vrij in view of Johnson in view of Barboza in view of Weber. Claims 8 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Vrij in view of Johnson in view of Barboza in view of Weber in view of McFarling.

Applicant's Amended Independent Claims 1 and 6

Applicant's amended independent claims 1 and 6 are directed toward, *inter alia*, a method and system for analyzing a corporate disclosure made by a representative to determine clusters of deceptive behaviors. After a record of the disclosure is received and displayed, the record is reviewed with a processor to determine the presence of a cluster of deceptive behaviors responsive to a stimulus. The cluster includes (i) at least one deceptive behavior that begins during a stimulus time interval determined by the stimulus onset and a predetermined period of time after the stimulus termination, and (ii) at least one deceptive behavior that begins after the stimulus time interval but before the end of a prior deceptive behavior included in the cluster of deceptive behaviors. However, the cluster does not include any deceptive behaviors that begin after the stimulus time interval and after the end of all prior deceptive behaviors included in the cluster of deceptive behaviors. The record is annotated, using an annotator, to indicate the presence of the

cluster of deceptive behaviors within the corporate disclosure as well as the type and number of deceptive behaviors within the cluster of deceptive behaviors, wherein the types of deceptive behaviors are retrieved from a database.

Applicant's amended independent claims provide an advantageous and systematic approach for analyzing corporate disclosures to determine the presence of a cluster of deceptive behaviors. This systematic approach includes an exacting methodology for grouping behaviors as clusters, namely, a technique for evaluating deceptive behaviors according to specific timing criteria in order to ascertain their suitability for inclusion in a cluster of deceptive behaviors. As such, a cluster of deceptive behaviors is not merely an arbitrary group of deceptive behaviors, but a carefully defined entity that reveals desirable information about the fidelity of a corporate disclosure.

Specifically, the technique for evaluating deceptive behaviors, as recited in applicant's independent claims, requires the detection of deceptive behaviors responsive to a stimulus, but limits which of the detected behaviors are included in the cluster based on timing criteria. For example, a first deceptive behavior responsive to a stimulus would be included in the cluster of deceptive behaviors if it began during a stimulus time interval determined by the stimulus onset and a predetermined period of time after the stimulus termination (e.g., five seconds after the end of the stimulus). This timing criteria ensures that the first deceptive behavior is sufficiently linked with the stimulus to be included in the cluster. A second deceptive behavior responsive to the stimulus but beginning after the stimulus time interval would also be included in the cluster of deceptive behaviors if it began before the end of a prior deceptive behavior in the cluster (e.g., the first deceptive behavior). This timing criteria ensures that the second deceptive behavior is sufficiently linked with the stimulus to

be included in the cluster, in view of its relationship to the prior deceptive behavior in the cluster. On the other hand, a third deceptive behavior responsive to the stimulus would not be included in the cluster of deceptive behaviors if it began both after the stimulus time interval and after the end of all prior deceptive behaviors in the cluster, since it may not be sufficiently linked with the stimulus.

Reviewing a corporate disclosure in this manner provides an objective measure (e.g., the number and type of deceptive behaviors in the cluster) of a level of deception in the corporate disclosure with respect to a particular stimulus. This systematic approach can be used to analyze an entire corporate disclosure by measuring a level of deception for each stimulus within the disclosure.

The references cited by the Examiner - discussed in greater detail below - do not show or suggest the claimed systematic approach. At best, the references refer to behavior detection unbound by timing criteria of the sort used by the applicant to ensure a behavior's connection to a stimulus. For example, in both Vrij and Johnson, a deceptive behavior detected after a defined stimulus time interval would still be included in deception analysis regardless of the status of previously identified deceptive behaviors. On the other hand, inclusion in a cluster of deceptive behaviors under the claimed approach requires the aforementioned deceptive behavior to begin within the duration of a prior deceptive behavior included in the cluster.

To make out a *prima facie* case of obviousness, the cited references must teach or suggest all the claim limitations of the rejected claim (MPEP § 2143). However, taken alone or in combination neither Vrij nor Johnson nor Barboza nor Weber show or suggest all of the features recited by applicant's independent claims 1 and 6. Thus, the rejections of independent claims 1 and 6 under 35 U.S.C. § 103(a) should be withdrawn.

A. The Combination of Vrij, Johnson, Barboza, and Weber does not Show or Suggest a Deceptive Behavior that Begins During a Stimulus Time Interval Determined by the Stimulus Onset and a Predetermined Period of Time After the Stimulus Termination

Applicant respectfully submits that neither Vrij, nor Johnson, nor Barboza, nor Weber, taken alone or in combination, shows or suggests determining the presence of a cluster of deceptive behaviors including at least one deceptive behavior that begins during a stimulus time interval determined by the stimulus onset and a predetermined period of time after the stimulus termination, as recited by applicant's independent claims.

The Vrij Reference

Vrij refers to an experiment described in the British Journal of Psychology that examined "participants' insight into their own behavior and speech content while lying" (Vrij, page 1, ¶ 1). The participants were shown a video and instructed that they would be interviewed twice about the subject material shown in the video. In one interview the participants were requested to lie and in the other they were requested to tell the truth (Vrij, page 2, ¶ 3). As part of the experiment, two observers reviewed videotapes of the interviews and coded the behavior of the participants (Vrij, page 3, ¶ 6). In addition, two raters reviewed transcripts of the interviews and scored the interviews using the Criteria-Based Content Analysis (CBCA) method, which assesses the credibility of statements by determining the presence of certain criteria (Vrij, page 4, ¶ 10). The coded behaviors and scored interviews were then compared to questionnaires completed by the participants concerning their beliefs about their own behavior during the interviews (Vrij, page 4, ¶ 9). The results measured the

differences between participants' expectations of their own speech and behavior and their actual speech and behavior.

While the Examiner contends that Vrij shows determining the presence of deceptive behaviors responsive to a stimulus, the Examiner concedes that Vrij does not disclose determining "behaviors that occur within a time interval of the beginning of the stimulus and a predetermined period of time after the end of the stimulus" (Office Action, page 6, ¶ 18). Instead, the Examiner alleges that Johnson discusses detecting deception during a time interval determined by the onset of the stimulus and a predetermined period of time after the end of the stimulus (*Id.*, ¶ 19).

#### The Johnson Reference

Johnson refers to a method of determining deception in a subject's response to stimuli. Specifically, Johnson refers to analyzing a subject's electrophysical activity, including event-related brain potential ("ERP"), and behavioral activity, including response time and response accuracy, to detect deception. In connection with analyzing electrophysical activity, Johnson discusses aligning ERP waveforms to the time of stimulus onset, referred to as "stimulus-locked ERPs." (Johnson, page 5, ¶ 86). Johnson's stimulus-locked ERPs are calculated using a time interval "linked to the time of the onset of the stimulus, e.g. from a short time before (baseline) to 1-2sec after the stimulus" (Johnson, page 8, ¶ 111).

Citing Johnson's discussion of stimulus-locked ERPs, the Examiner argues that "it would have been obvious to one of ordinary skill in the art at the time of the invention to have included starting a predetermined time period with the beginning of the stimulus, as disclosed by Johnson, for the motivation of establishing a reference point for collecting data" and further that "it is old and well known to collect data over a period of time and [...] to begin collecting these

types of data at the onset of the stimulus" (Office Action, page 6, ¶ 19).

Despite the Examiner's contention, applicant respectfully submits that Johnson does not show or suggest determining the presence of a cluster of deceptive behaviors including at least one deceptive behavior that begins during a stimulus time interval determined by the stimulus onset and a predetermined period of time after the stimulus termination, as recited by applicant's independent claims. First, Johnson's discussion of using a time interval for data collection concerns ERP waveforms, which are monitored directly from the brain, and not observable behaviors. When it comes to observable behaviors, on the other hand, Johnson refers to collecting information (a) "following each stimulus," and not, as the Examiner claims, during a time interval inclusive of the stimulus, and (b) until a response from the subject is received, and not, as the Examiner claims, for a predetermined period of time after the end of the stimulus (Johnson, page 8, ¶ 104). Second, Johnson cannot refer to detecting a deceptive behavior in a predetermined time interval since the behavioral information Johnson collects is response time (Johnson, page 6, table item 7 and page 8, ¶ 104). Response time, by definition, is variable and therefore cannot be bound by a predetermined period of time after stimulus termination. As Johnson states, "the method of the invention detects deceptive responses by quantifying behavioral performance [...] when subjects are presented with stimuli to which they must respond" (Johnson, page 9, ¶ 119). Applicant's independent claims, on the other hand, provide a specific window of time during which a first deceptive behavior must begin, which is unaffected by the presence, absence, or timing of a response.

Furthermore, applicant respectfully disagrees with the Examiner's position that "it is old and well known to collect data over a period of time and [...] to begin

collecting these types of data at the onset of the stimulus" (Office Action, page 6, ¶ 19). Applicant also respectfully disagrees with the Examiner's position that since "data collection and various observable time frames for collecting data are well known in the art, it is obvious to combine these well known methods as the combination will produce the predictable results of data collection within a known time frame" (*Id.*). In fact, the Examiner, in connection with claims 8 and 16, appears to offer the exact opposite contention. In particular, the Examiner states that "it is obvious that data collection would continue beyond the predetermined time interval [...] in order to collect all the verbal and non-verbal response data" and "without providing the flexibility in time for data collection, an incomplete profile of the subject is created and the findings are skewed" (Office Action, page 10, ¶ 43). Thus, the Examiner seems to suggest that collecting data within a predetermined timeframe and collecting data beyond a predetermined timeframe are equally obvious.

While the applicant agrees with the Examiner that data collection may be performed in many different ways, applicant's claims do not merely recite a method of data collection. Rather, applicant's systematic technique provides a reliable and advantageous assessment of deceptiveness in a corporate disclosure. First, the claimed feature of detecting at least one deceptive behavior that begins within a specified stimulus time interval ensures that the entire cluster of deceptive behaviors is sufficiently linked to the stimulus itself and not to some other intervening event. To be sure, providing such an unambiguous, fixed time interval for determining at least one deceptive behavior appears to defy the Examiner's conventional wisdom that "without providing the flexibility in time for data collection, an incomplete profile of the subject is created and the findings are skewed." Second, the claimed feature of detecting at least one

additional deceptive behavior that begins after the stimulus time interval but within the duration of a prior deceptive behavior in the cluster ensures that the cluster of deceptive behaviors includes other deceptive behaviors of interest -- namely, those deceptive behaviors that are linked to the stimulus through another behavior rather than through absolute timing. Thus, even assuming the Examiner is correct in asserting that "it is obvious to combine [known data collection] methods [to] produce the predictable results of data collection within a known time frame," requiring the inclusion of behaviors outside a known time frame is clearly unique. The Examiner should therefore be the first to concede that the applicant's claimed behavior detection mechanisms are distinctly non-obvious.

Accordingly, applicant respectfully submits that neither Vrij nor Johnson, taken alone or in combination, shows or suggests determining the presence of a cluster of deceptive behaviors including at least one deceptive behavior that begins during a stimulus time interval determined by the stimulus onset and a predetermined period of time after the stimulus termination, as recited by applicant's independent claims. In addition, nothing in Barboza or Weber makes up for this deficiency in Vrij and Johnson.

B. The Combination of Vrij, Johnson, Barboza, and Weber does not Show or Suggest Determining a Cluster of Deceptive Behaviors

Applicant respectfully submits that neither Vrij, nor Johnson, nor Barboza, nor Weber, taken alone or in combination, shows or suggests determining the presence of a cluster of deceptive behaviors, wherein the cluster of deceptive behaviors includes at least two deceptive behaviors satisfying defined timing criteria. As amended, the applicant's independent claims require that the cluster of deceptive behaviors:

(a) includes at least one deceptive behavior that begins during a stimulus time interval determined by the stimulus onset and a predetermined period of time after the stimulus termination;

(b) includes at least one deceptive behavior that begins after the stimulus time interval and before the end of a prior deceptive behavior included in the cluster of deceptive behaviors;

(c) does not include any deceptive behaviors that begin after the stimulus time interval and after the end of all prior deceptive behaviors included in the cluster of deceptive behaviors.

As discussed above, the composition of the cluster of deceptive behaviors - namely, the inclusion of some deceptive behaviors but not others - is important and unique to the claimed approach of detecting a level of deception in a corporate disclosure. In particular, the claimed discriminative process whereby deceptive behaviors are examined in view of defined timing criteria is not shown or suggested by Vrij, Johnson, Barboza, or Weber.

First, the Examiner alleges that Vrij shows determining a cluster of deceptive behaviors responsive to a stimulus, citing Vrij's discussion of identifying credibility criteria associated with each of a subject's answers provided in a transcript (Vrij, page 4, ¶ 10). Applicant respectfully submits, however, that Vrij does not show or suggest determining the presence of a cluster of deceptive behaviors, as required by applicant's independent claims. Merely identifying multiple criteria associated with an answer, as Vrij discusses, does not show or suggest that the criteria can be grouped together as a cluster of deceptive behaviors. In contrast, each of the deceptive behaviors in the cluster of applicant's independent claims 1 and 6 begins either during a defined time interval or within the duration of a prior deceptive behavior included in the cluster of deceptive

behaviors. All deceptive behaviors in the cluster are thus linked to at least one deceptive behavior that begins within the defined time interval. In this way, each of the deceptive behaviors in the cluster is linked to the stimulus in a particular and systematic way.

Second, applicant respectfully submits that Johnson does not show or suggest determining the presence of a cluster of deceptive behaviors, as required by applicant's independent claims. Johnson's method includes providing a stimulus to a subject and requesting the subject to "make a speeded discriminative response to the relevant and/or irrelevant stimuli by designating each item as relevant or irrelevant as quickly as possible" (Johnson, page 8, ¶ 104). The subject's response is thus confined to one of two possible answers and "is typically relayed by pressing a button" (*Id.*). Deception is determined, in Johnson, by collecting the subject's response, response time, and brain activity "following each stimulus" and comparing the information to a baseline of information previously collected in response to control stimuli (Johnson, page 8, ¶ 104, page 10, ¶ 131, page 17, ¶ 196).

As argued above, Johnson does not limit the time interval for detecting at least one deceptive behavior responsive to a stimulus. Instead, Johnson waits for a subject to respond to stimuli and, regardless of how much time has passed, includes the response in the deception analysis. Thus, even assuming, *arguendo*, that Johnson shows determining deception based on multiple criteria, Johnson does not refer to a discriminative process whereby a cluster of deceptive behaviors is determined to include some behaviors but not others.

Accordingly, applicant respectfully submits that neither Vrij nor Johnson, taken alone or in combination, shows or suggests determining the presence of a cluster of deceptive behaviors, as recited by applicant's independent claims. In

addition, nothing in Barboza or Weber makes up for this deficiency in Vrij and Johnson.

C. The Combination of Vrij, Johnson, Barboza, and Weber does not Show or Suggest Reviewing a Corporate Disclosure

Applicant respectfully submits that neither Vrij, nor Johnson, nor Barboza, nor Weber, taken alone or in combination, shows or suggests reviewing a record of a corporate disclosure by a representative, wherein the disclosure is related to the performance of an entity associated with the representative, as required by applicant's independent claims.

The Examiner concedes that Vrij does not disclose "analyzing a disclosure related to the performance of an entity associated with the representative" (Office Action, page 6, ¶ 18). However, the Examiner alleges that Barboza refers to studying the behaviors of financial managers and the need to detect deception in the financial world. Barboza is a newspaper article about a settlement that a brokerage firm made with the SEC, after it failed to properly supervise an employee in the underwriting of a municipal bond issue. The Bank hired a consultant to review some of its procedures in an attempt to prevent a similar occurrence. The Examiner believes that it would be obvious to combine Vrij and Barboza in order to understand "the correlation of lying to behaviors as it relates to financial managers for the purpose of detecting and preventing fraud" (Office Action, page 7, ¶ 23).

Without taking a position on the propriety of combining Vrij and Barboza for the purposes outlined by the Examiner, applicant submits that the combination of Vrij and Barboza still does not show or suggest reviewing a record of a corporate disclosure by a representative, wherein the disclosure is related to the performance of an entity associated with the representative, as required by applicant's

independent claims. Even assuming, *arguendo*, that "Vrij teaches the behavior of liars" and "Barboza teaches the need in the financial world to detect deception," as maintained by the Examiner (*Id.*), there is nothing in Barboza that relates in any way to analysis of corporate disclosures for the purpose of determining deceptive behaviors of a representative, wherein the disclosure is related to the performance of an entity associated with the representative. As a result, it is not obvious to combine Vrij and Barboza to show the applicant's claimed approach.

In addition, applicant respectfully submits that, in making this rejection, the Examiner appears to be applying impermissible hindsight, which is disallowed by MPEP § 2141.01(III). In establishing the motivation for a rejection under 35 U.S.C. § 103(a), "the examiner must step backward in time" and "[i]n view of all factual information, the examiner must then make a determination whether the claimed invention 'as a whole' would have been obvious at that time" (MPEP § 2142). The combination proposed by the Examiner in the instant case would require one of ordinary skill in the art at the time of applicant's invention to apply the circumstances of Barboza's improperly supervised employee to the results of Vrij's experiment, which was directed to examining participants' expectations of their own speech and behavior while lying, in order to suggest analyzing a corporate disclosure for deceptive behaviors. Applicant respectfully submits that "[combining] prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight" (In re Dembicza, 175 F.3d 994, 999 (Fed. Cir. 1999)). Accordingly, applicant respectfully submits that the Examiner has failed to establish sufficient motivation for one of ordinary skill in the art to make the suggested combination.

Lastly, the Examiner notes that the "type and content of disclosure is nonfunctional descriptive data and are not functionally involved in the steps recited" and that "detection of deception behavior would be performed regardless of the nature of the disclosure analyzed" (Office Action, page 7, ¶ 24). However, applicant respectfully submits that the claimed approach not only provides a technique for detecting deceptive behaviors, but is directed to analyzing a corporate disclosure in order to determine a level of deception within the disclosure. As such, the type and content of the disclosure, insofar as successful calculation of a level of deception depends on the type and content of the disclosure being reviewed, is an essential element of the claimed approach.

Accordingly, applicant respectfully submits that neither Vrij nor Barboza, taken alone or in combination, shows or suggests reviewing a record of a corporate disclosure by a representative, wherein the disclosure is related to the performance of an entity associated with the representative, as required by applicant's independent claims. In addition, nothing in Johnson or Weber makes up for this deficiency in Vrij and Barboza.

D. The Combination of Vrij, Johnson, Barboza, and Weber does not Show or Suggest Using an Annotator to Indicate the Presence of a Cluster of Deceptive Behaviors Within a Corporate Disclosure

Applicant respectfully submits that neither Vrij, nor Johnson, nor Barboza, nor Weber, taken alone or in combination, shows or suggests using an annotator to indicate the presence of a cluster of deceptive behaviors within a corporate disclosure, as required by applicant's independent claims.

The Examiner alleges that Weber refers to the annotation of recorded events in a business domain. Weber refers to a system for entering and storing user information about an event and correlating that information with recorded event data. As such, the Examiner believes that it would be obvious to combine Vrij and Weber for the purpose of showing the annotator of applicant's independent claims. The Examiner further notes that "the content of the annotation is nonfunctional descriptive data" and that "the annotation of the record would be performed regardless of the descriptive content of the annotation" (Office Action, page 7, ¶ 28).

Applicant respectfully submits, however, that the annotation feature of applicant's independent claims is much more than simple notation of a record. The applicant's deception analysis technique is directed to analyzing a corporate disclosure in order to provide useful information on a level of deception associated with that disclosure. As such, the content of the annotation is highly relevant to the claimed approach. In particular, applicant's annotation includes a reference to each type of deceptive behavior, as well as the number of deceptive behaviors, within the cluster of deceptive behaviors. These particular annotation elements are the resulting output of the claimed deception analysis technique and are essential to providing useful deception information to a reviewer.

The combination of Vrij and Weber does not show or suggest using an annotator to indicate (a) the presence of a cluster of deceptive behaviors within a corporate disclosure, (b) a reference to each type of deceptive behavior within the cluster of deceptive behaviors, wherein the types of deceptive behaviors are retrieved from a database, and (c) the number of deceptive behaviors within the cluster of deceptive behaviors. First, there is nothing in Weber that relates in any way to analysis of corporate disclosures to find deceptive behaviors of a representative. As a result, it is not obvious to

combine Vrij and Weber to show the applicant's claimed annotation feature. Second, neither Vrij nor Weber show or suggest an annotation that includes a reference to each type of deceptive behavior within the cluster of deceptive behaviors and the number of deceptive behaviors within the cluster of deceptive behaviors. Third, neither Vrij nor Weber show or suggest a database for retrieving references to the types of deceptive behaviors for use in the annotation.

Accordingly, applicant respectfully submits that neither Vrij nor Weber, taken alone or in combination, shows or suggests using an annotator to indicate the presence of a cluster of deceptive behaviors within a corporate disclosure, as required by applicant's independent claims. In addition, nothing in Johnson or Barboza makes up for this deficiency in Vrij and Weber.

E. Conclusion

For at least the reasons listed above neither Vrij nor Johnson nor Barboza nor Weber discloses or suggests all of the elements of applicant's independent claims 1 and 6. Further, the combination of features to which all of these references cumulatively contribute also falls short of applicant's claimed invention.

Accordingly, for at least the reasons listed above, applicant respectfully requests that the rejections of amended independent claims 1 and 6 under 35 U.S.C. §103(a) be withdrawn. Dependent claims 2-5 and 7-12 are also patentable at least because they depend from patentable independent claim 1. Dependent claims 13-17 are patentable at least because they depend from patentable independent claim 6. For at least this reason, applicant respectfully requests that the rejection of claims 2-5 and 7-17 under 35 U.S.C. § 103(a) also be withdrawn.

The New Claims

Applicant has added new claims 18 and 19 in order to more particularly define the invention. New claims 18 and 19 do not add new matter and are fully supported by the original specification. In addition, new claims 18 and 19 depend from either independent claim 1 or independent claim 6. For at least this reason, applicant respectfully submits that dependent claims 18 and 19 are also patentable.

Conclusion

For at least the reasons set forth above, applicant respectfully submits that this application, as amended, is in condition for allowance. Reconsideration and prompt allowance of this application are respectfully requested.

Respectfully submitted,

/Michael J. Chasan/

---

Michael J. Chasan  
Reg. No. 54,026  
Attorney for Applicant  
ROPES & GRAY LLP  
Customer No. 28120  
One International Place  
Boston, MA 02110